

NSG-727

PLANNING, PROGRAMMING AND BUDGETING:

A TECHNIQUE

FOR

FEDERAL PROGRAM PLANNING

AND

DECISION-MAKING

BY:

Robert G. Smith  
Program of Policy Studies  
The George Washington University  
24 November, 1965

GPO PRICE \$ \_\_\_\_\_

CFSTI PRICE(S) \$ \_\_\_\_\_

Hard copy (HC) 2.00

Microfiche (MF) .50

ff 653 July 65

FACILITY FORM 802

**N66 29571**  
(ACCESSION NUMBER)  
32  
(PAGES)  
CR-75897  
(NASA CR OR TMX OR AD NUMBER)

\_\_\_\_\_  
(THRU)  
1  
(CODE)  
34  
(CATEGORY)

## FOREWORD

The following report analyzes the evolution and possible impact of the Federal Planning-Programming-Budgeting system, a "new" management planning and decision-making technique proposed by President Johnson to the heads of key government agencies.

The report, which is intended to be an input to a more detailed study of the management planning function, both in the Federal Government and private industry, is based on a study of selected books, documents, and reports on the subject, and on discussions with responsible and knowledgeable individuals in the Federal Government, in research institutes, and in private industry. However, the opinions expressed and the conclusions reached are the author's and do not necessarily represent the opinions or the policies of the Program of Policy Studies or The George Washington University.

## INTRODUCTION

Late this summer President Johnson issued a statement to members of the Cabinet and heads of agencies that will have a significant effect on the management of the Federal government, particularly on the Executive decision-making process, on the responsibilities and prerogatives of the various government agencies, and on the dialogue between the government and industrial communities. In his statement, the President proposed that a "new" Planning-Programming-Budgeting system be adopted throughout the Federal Government. In October, a directive was sent by the Bureau of the Budget to selected agency heads, which outlined the purpose, requirements, and guidelines for establishing this new system in twenty-two agencies, and suggested that seventeen other agencies give the directive serious consideration.\*

While the President's statement on planning-programming and budgeting and the subsequent directive were issued without fanfare, the magnitude and potential impact of these two documents are implicit in the objectives of the PPB system; namely, to help the Executive Office:

Identify our national goals on a precise and continuing basis;

Select those goals that are most urgent;

Define alternative means for reaching the selected national goals by the most effective and least costly route;

Conduct the budgeting in support of these goals and the related programs over a period of several years rather than on a year-by-year basis;

---

\* Bulletin No. 66-3, Executive Office of the President, Bureau of the Budget, Washington, D.C., October 12, 1965.

Evaluate the national programs to insure "a dollar's worth of service for each dollar spent."

The institution of this new management technique throughout the Federal Government raises a number of questions; namely: What is the Planning-Programming-Budgeting system? What effect will it have on current Government operations? What new problems and potentialities will it create?

#### THE PPB SYSTEM: EVOLUTION AND RATIONALE

The Planning-Programming-Budgeting system the President referred to is "new" only within the context of the Federal Government. In fact, it is based, in part, on the management concepts, techniques and processes employed over the past ten to fifteen years by imaginative industrial managers, and partially on the pioneering efforts of certain research organizations, notably the RAND Corporation. This non-profit institute, established in 1948 to conduct analytical studies for the Air Force, initiated some of the first definitive research on planning, programming, and budgeting within RAND's Economics Department, then headed by Charles J. Hitch. Mr. Hitch's book, The Economics of Defense in the Nuclear Age,\* was not only one of the first detailed expositions on the concept and practice of planning, programming and budgeting, for national defense purposes, but it coincided in timing and philosophy with the findings of the Symington Committee on the Defense Establishment which President-elect

---

\* Hitch, Charles J., and McKean, Roland N., The Economics of Defense in the Nuclear Age, Harvard University Press, 1960.

John Kennedy established in 1960 to study the reorganization of the Department of Defense. While the conceptual relationship between the Symington Committee report and Hitch's book was essentially coincidental, it was a factor in Mr. Hitch's future career; for when President Kennedy took office in 1961, Mr. Hitch was appointed DOD Comptroller and was asked by Secretary of Defense Robert S. McNamara to put the planning and budgeting techniques outlined in his book into practice.

Such procedural changes were long overdue since prior to 1961 a means for coupling DOD planning to budgeting did not exist. Defense Department planning was done on the basis of separate Army, Navy, and Air Force requirements, and the budgeting on the basis of essentially unrelated "Personnel," "Maintenance," and "Construction" categories. The situation was further complicated by the overemphasis on the policy of "massive retaliation," which had resulted in an overconcentration of forces and weapons to fight strategic war and a relative depletion of the forces required to fight limited war.

Moreover, the budget to support this unsymmetrical forces and weapons structure was projected only one year ahead, even though many of the planning decisions were made on weapons systems that would not be operational for three, five, or even ten years hence. Furthermore, the pre-1961 defense budgets not only gave little indication of the specific resource implications of the planning decisions and actions, but did not differentiate between the initial and subsequent operational expenses associated with the related weapons developments.

As stated by David Novick of the RAND Corporation:\*

By January of 1961 there had been a quiet but long-standing recognition of this deficiency in relating military budgeting to planning . . . and a recognition, at least in some quarters,

of the need for major change. It was in this context that the new administration in 1961 embarked upon the planning for its military activities. One of the major features it introduced was the recognition of the need for a method for integrating resource programming and budgeting into military planning.\*\*

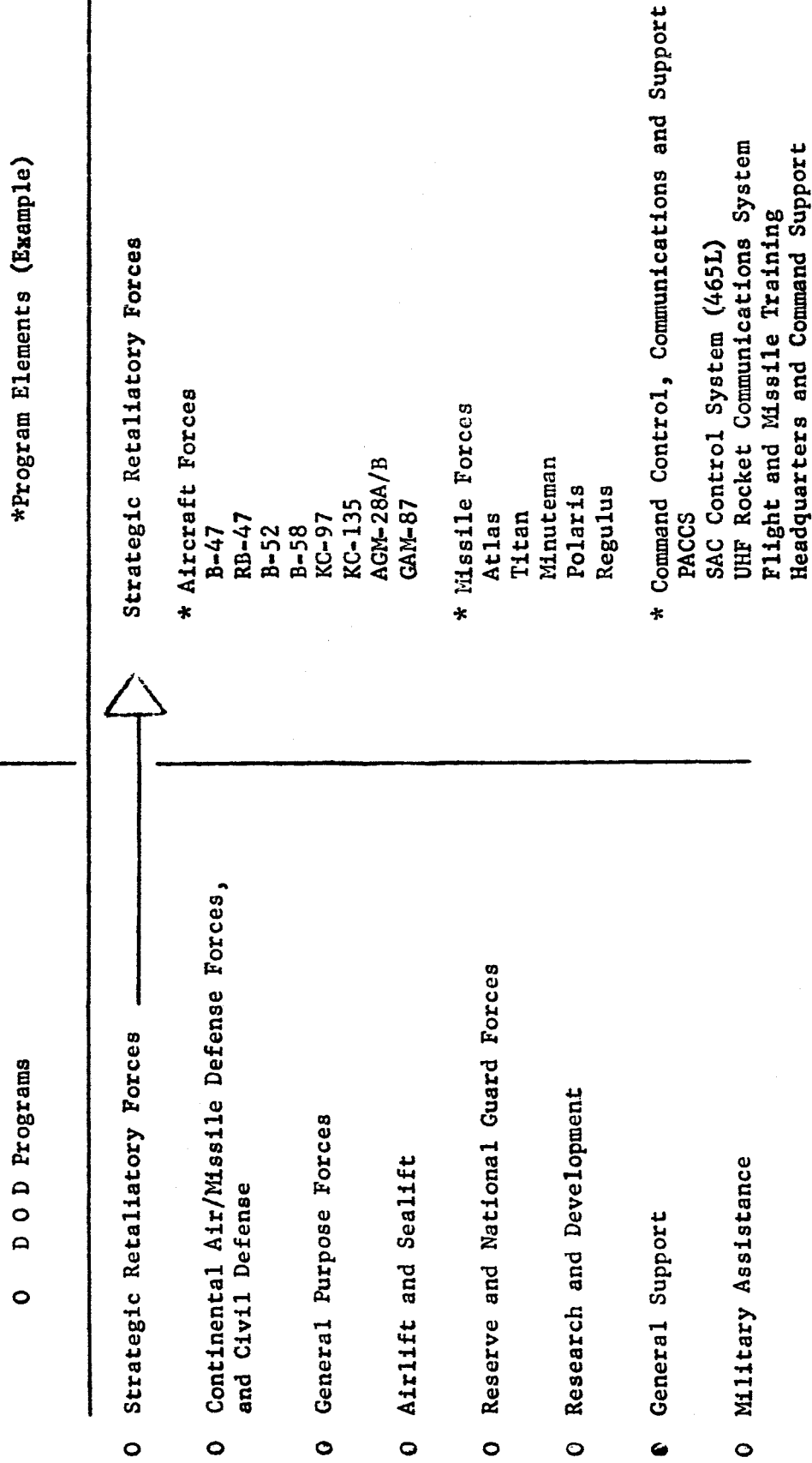
The programming and budgeting system introduced by Mr. Hitch in 1961 and put to its initial test in the preparation of the Defense Budget for the fiscal year 1963 was the first major step toward meeting the need for coordinated budgeting and planning in the Department of Defense. In addition the new system included: 1) a DOD program package (see Fig. 1) which was proposed and implemented on the basis of overall Defense missions and force requirements rather than on a narrow service-by-service basis; 2) detailed, in-depth analyses of alternatives to meet specific military objectives and missions; and, 3) a five-year force structure and financial program.

However, the impact of the PPB system went far beyond basic procedural changes. Eventually DOD decision-making became more centralized; new organizational elements were created; the process of evaluating weapons proposals and selecting contractors was modified; and the management power center shifted from the services to the Office of the Secretary of Defense. In addition, the Department of Defense was functionally, if not formally, reorganized; major activities which cut across service lines,

---

\* Novick, David, Program Budgeting in the Department of Defense, The RAND Corporation, RM-4210-RC, September, 1964.

Figure I



Source: Statement of Secretary of Defense Robert S. McNamara before the House Armed Services Committee, Washington, D.C., 1965.

such as communications, supply, and intelligence, were centralized; formal plans and budgets covering a five-year -- rather than one-year period were put into effect; and a basically uniform budget procedure and accounting system was established.

The adoption of planning-programming and budgeting by the Department of Defense has also had direct and indirect effects on weapons procurement procedures and, consequently, on Government/industry relationships.\* Positive evidence of these effects can be found by examining the controversy that surrounded the decisions to develop the F-111 (nee TFX) fighter-bomber and to cancel the Skybolt missile.

The implementation of planning-programming and budgeting within DOD also initiated a quiet and continuing revolution in the defense industry: marketing, planning, and contractual procedures in the aerospace industry were modified; cost-effectiveness and planning groups created or strengthened; and the traditional technical emphasis in top management shifted in the direction of broader management capabilities. For example, in some companies the intuitive "shoot-from-the-hip" executive was replaced by men experienced in the more sophisticated management techniques of planning, systems engineering, and methodical decision-making.

This is not to say that planning, programming and budgeting were introduced to DOD without problems, or that the new system was totally effective from the beginning; in fact, there was and still is objective and sub-

---

\* See Root, Eugene L., "Project Management From a Defense Industry Point of View," talk before the Air Force Institute of Technology, Project Management Course, October 1, 1965, page 24.



jective criticism of the programming and budgeting technique (both within and outside the Department), particularly, the use of cost-effectiveness studies, systems analyses, and computer techniques. It is beyond the scope of this paper to evaluate the basis and nature of this criticism, however, former DOD Comptroller Charles H. Hitch stated in his recent book:\*

Much of the criticism directed against the technique of using cost-effectiveness studies or systems analysis is really related to specific decisions; people who for one reason or another dislike a particular decision attempt to fault the technique and rationale which led to it. Let it be said, here and now, the computers do not make decisions and neither do systems analysts. The job of the systems analyst is to free the decision-maker from questions which can best be resolved on the basis of judgement. The systems analyst, for example, can tell the decision-maker how many more targets would be destroyed if two hundred new bombers were added to the planned force and how much they would cost; he can rarely demonstrate whether they should or should not be added ... It seems to me that anyone who has to make the kind of decisions which fall to the lot of the Secretary of Defense would want to have something more to rest on than unsubstantiated judgement, even though that judgement is based on extensive, if not wholly relevant, experience.

#### THE FEDERAL PPB SYSTEM: CONCEPT AND CHARACTER

The Planning-Programming-Budgeting system that has provided the analytical and procedural base for the many changes that have taken place in the Department of Defense, and is now to be employed throughout the Federal Government is a management technique for systematically defining primary objectives and alternatives, then matching these objectives and alternatives to the appropriate resources, within a structured

---

\* Hitch, Charles J., Decision-Making for Defense, University of California Press, Berkeley and Los Angeles, 1965.

information matrix. This technique is designed to assist top management in its planning, decision-making, and directive responsibilities.

The President's request that this technique be adopted by the key Federal agencies has come about for two basic reasons: first, because of the successful application of the PPB system within the Department of Defense; and second, a recognition of fundamental defects in the Governmental decision-making and budgeting processes. The nature of these defects was sharply defined by Henry S. Rowen, Assistant Director, Bureau of the Budget, who stated in a recent speech \* that under the present system:

. . .program descriptions and justifications are vague, incomplete, and unquantified; objectives are stated unclearly; sometimes they are inconsistent internally or with other programs; measures of performance are missing, of dubious validity and too little quantified; cost estimates are poor and biased; alternative objectives, alternative programs to reach these objectives or different levels within a given program are not suggested; records of program performance and costs as compared with promises are poor; and requirements are stated in absolute terms. We are told: 'This is the need.' 'We must attain this level.' The notion that there can be more or less of a given program is resisted. In fact, there are very few things in life, or at least in Federal programs of which that is true. In short, often top management has too little systematic information on what it should be trying to accomplish, what the best ways of accomplishing these objectives are, and how its programs are faring.

The PPB system, which will hopefully improve the situation described by Mr. Rowen, comprises the following, closely-knit activities:

Planning - The systematic determination of major national or agency objectives; the definition of alternative courses of action to achieve such objectives; and the selection of an optimum course, or courses, of action from among these alternatives.\*\*

---

\* Rowen, Henry S., "Improving Decision-Making in Government," speech before the Budget Bureau's Summer Seminar on Systems Analysis and Program Evaluation, Executive Office of the President, Washington, D.C., August 19, 1965.

\*\* For a discussion of the planning process, see Scott, Brian W., Long-Range Planning in American Industry, American Management Association, Inc., New York, New York, 1965.

Programming - the definition and scheduling of the major programs or activities designed to meet the planning objectives, and the coupling of these programs to the appropriate manpower, material, and facility requirements.

Budgeting - the coupling of specific budget dollars to the overall national or agency objectives, the specific programs, and the related manpower, material, and facility resources.

Woven tightly into the fabric of planning-programming and budgeting is a complex analytical process defined as systems, cost/utility, or cost effectiveness analysis. Regardless of the definition employed, the basic character of this analytical process is the same. It includes two prime functions: 1) systematic analyses of objectives and the alternative means for achieving such objectives within an environment characterized by uncertainty, a future time scale, and a complex spectrum of technological, political, and economic parameters; and 2) comparative evaluations of the cost and utility of the various objectives, alternatives, and related programs.

In the conduct of systems or cost/utility analyses, it is necessary to define the scope of the problem by posing appropriate questions and designing an analytical framework to answer these questions. In some cases it may be helpful to construct a decision-making model which is then used to determine the relationship between, as well as the cost and utility of, the program objectives and the various alternatives. However,

since it is only a theoretical structure, it is desirable to test the model within a range of possible "real-world" situations.\*

In addition to its functional and analytical character, the Planning-Programming-Budgeting system includes the design of a program package. While there is no common definition of the term "program package" or "program", one of the best concepts and definitions of what a program involves exists in the Department of Defense (see Fig. 1).

Using the DOD program package as a guide it is possible to define similar structures for other major Federal activities. To illustrate, planning, and budgeting in the important area of transportation is presently a highly fragmented activity, scattered throughout a variety of Federal agencies such as the FAA, the Coast Guard, and the Department of Commerce. These agencies, in turn, are responsible for a number of loosely defined transportation activities including: aviation, highways, and trust funds. This structure gives little or no indication of national transportation objectives, future plans, or alternatives, and is primarily based on traditional agency roles and missions -- the overall national need is not apparent.

Under a new format suggested by the Bureau of the Budget, transportation programs and budgets would be defined on the basis of overall national requirements. (See Fig. 2) In comparing the current program with the suggested one, it is apparent that in the former case the agencies' traditional agency responsibilities and prerogatives are

---

\* For a detailed discussion on cost-utility analysis see: Novick, David, (Editor), Program Budgeting, Chapter 2, Government Printing Office, Washington, D.C., 1965.

Fig. 2

FEDERAL TRANSPORTATION PROGRAM\*

Current Appropriations Structure

- Aviation
  - Federal Aviation Agency
  - Civil Aeronautics Board
- Water Transportation
  - Coast Guard
  - Department of Commerce
  - Inter-oceanic Canal Commission and Others
- Highways
  - Natural Forests
  - Public Land
- Trust Funds
  - Highway Trust Fund

Suggested Program Structure

- General Inter-City Transportation
  - Interstate Highways
  - Domestic Water Transportation
  - Aviation
- Urban Commuter Transportation
  - Urban Highway System
  - Urban Transit System
- Rural Access
  - Secondary Road System
  - Forest, Public Lands, National Parks Road System
- Aid to Local Service Aviation
- Military Standby Transportation
- International Trade and Prestige

Budgeting on a year-by-year basis

Intra-agency Responsibilities

Budgeting over a period of several years

Inter-Agency Responsibilities

\* See, Rowen, Henry S., "Improving Decision-Making in Government," Executive Office of the President, Washington, D.C., August 19, 1965.

stressed; in the latter case the national requirements are emphasized. Furthermore, it is clear that if the Federal Government were to shift from an agency-oriented transportation program to one that emphasizes overall national objectives, significant changes in the current power structure, the decision-making processes and the related budgetary allocations would take place.

### THE IMPACT

In a larger sense, it is reasonable to assume that significant changes will not only take place in the area of transportation, as a result of planning, programming and budgeting, but in the operation of the Federal Government as a whole; particularly, in the responsibilities, objectives, and appropriation levels of those agencies affected by the Presidential directive.\*

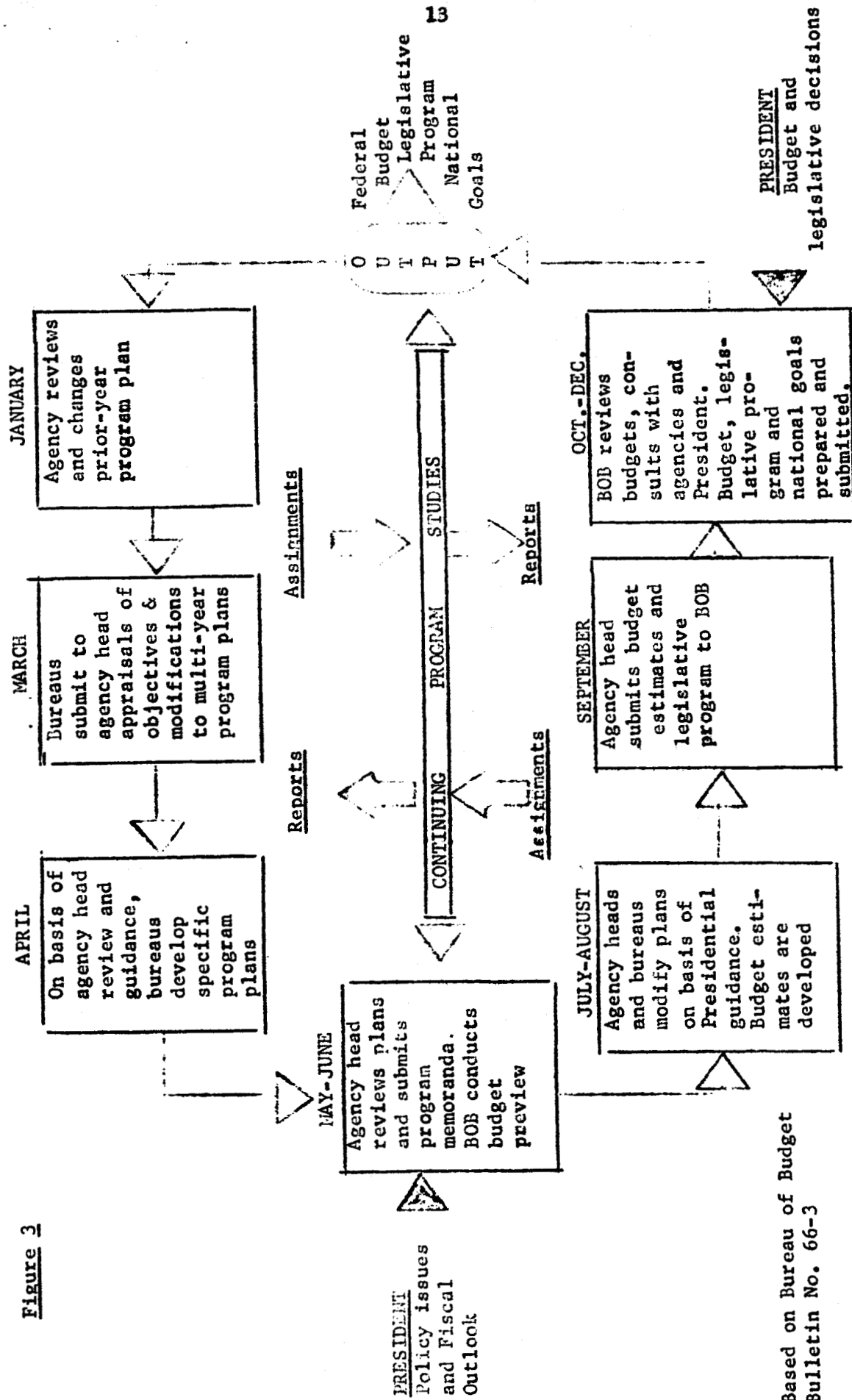
One of the most immediate and far-reaching changes proposed involves the annual Federal budget review and formulation process. For example, under the current procedures, the budget formulation and review is crowded into a few months with little or no machinery for monitoring, analysis, or reprogramming throughout the year. In contrast, the new annual budget cycle (see Fig. 3), proposed as part of the Planning-Programming-Budgeting system would operate over a twelve-month period and include the following steps:\*\*

---

\* President Johnson in his State of the Union Message to Congress has suggested that a new Transportation Agency be established.

\*\* Figure 3 and the budget cycle discussed above are based on data in The Bureau of the Budget Bulletin, No. 66-3, Washington, D.C. Oct. 12, 1965.

Figure 3



\*Based on Bureau of Budget Bulletin No. 66-3

In January, relevant Federal agencies will make changes in the prior multi-year program plan. These changes conform to Presidential decisions as reflected in the budget sent to the Congress.

By March bureaus or similar major organizational units within the agency will submit to the agency head current appraisals of approved program objectives and multi-year plans as well as proposals for: 1) needed modifications, including measures to meet new needs and to take account of changing and expiring needs; and 2) expansion of plans to cover an additional year. The Director of the Bureau of the Budget will advise the agency head of any change in the overall policies and objectives upon which the currently approved plan is based.

In April. Each bureau will develop specific program plans, on the basis of instructions from the agency head and following his review of individual bureau submissions.

In May analytic staffs will complete the program memoranda. The agency head then reviews program plans and approves the program memoranda for submission to the Bureau of the Budget. On the basis of this review, the agency head may want to assign additional studies to his staff.

In May-June the budget preview is conducted by the Bureau of the Budget. The basic documents for this preview are the program memoranda prepared by agencies and submitted to the Bureau of the Budget by May 1, and special studies to be submitted over a period of several months preceding this date. During this period Presidential guidance will be obtained, where necessary, on major policy issues and on the fiscal outlook.

In July-August appropriate changes to program plans are made on the basis of the Presidential guidance, and Congressional legislation and appropriations. Budget estimates, including those for new legislative



proposals, are developed on the basis of the first year of the currently approved program plans.

In September budget estimates and agency legislative programs are submitted by the agency heads to the Bureau of the Budget.

In October-December the Budget Bureau reviews budget estimates, consults with agencies, and makes its recommendations to the President. Presidential decisions are transmitted to agencies; the budget is prepared for submission to Congress; the legislative program is specified; and the various national goals and objectives are defined.

In January the annual cycle is completed and a new one initiated. Changes are again made by the agencies to the multi-year program plan to conform to Presidential decisions, as reflected in the budget sent to Congress.

In addition to a new budget cycle, other changes, resulting from the Planning-Programming-Budgeting directive, have already taken place. For example, each agency named in the directive has selected an individual to direct its Planning-Programming-Budgeting system, who, with the appropriate staff, has been asked to define specific program categories. The program definitions, as well as other activities specified in the BOB directive\*, are to be initiated by the relevant agencies between now and May 1, 1966, when each agency's multi-year program plan, the related program memoranda, and the special studies will be forwarded for preview by the Bureau of the Budget.

---

\* Reference No. 1

Related to the BOB directive, it was announced on November 9, 1965, that President Johnson had approved a plan for reorganizing the Department of Health, Education and Welfare. \* One of the most significant steps taken as a result of this plan was the creation of a new Office of Comptroller. This action and the related responsibility of the new position are analogous to the circumstances surrounding the creation of the Office of Deputy Secretary of Defense (Comptroller) in 1961. Like the DOD decision, the objective of the new HEW plan is to centralize management and budgetary control over the many offices reporting directly to HEW Secretary John Gardner, and to authorize and direct the necessary systems analysis and cost/effectiveness studies.

Also in line with the BOB directive, it was announced in the November 15th issue of the New York Times that a special eight-man Presidential Commission, headed by the former Director of the Bureau of the Budget, Kermit Gordon, has begun working on far-reaching proposals to reorganize and plan for the total Federal effort on urban housing, poverty, and mass transportation.\*\* As quoted in the Times, an unnamed Federal official stated, "Organizationally this (committee study) is probably as difficult and significant a job as the reorganization and unification of the armed forces in 1947. \*\*\* The idea is to pull all urban assistance programs together, for the first time, into a coordinated thrust that will have some impact on the problems."

---

\* Washington Post, November 9, 1965.

\*\* New York Times, November 15, 1965.

\*\*\* Emphasis added

Other changes in the organization and management processes of key Government agencies are anticipated as a consequence of the PPB directive. For example, an increase in the analytical and R & D capability, within, and external to, the major Federal agencies - particularly those agencies concerned with non-defense problems - will take place. This evolution will be characterized by the gradual acquisition of skilled analysts and planners within and outside the relevant organizations, the creation of special interdisciplinary staffs to assist top management, and increases in the R & D expenditures of non-defense agencies and bureaus.

#### PROBLEMS AND PCTENTIAL

These firm and anticipated changes indicate - as does the DOD experience - that planning-programming and budgeting will have an evolutionary, if not revolutionary, impact on the Federal Government. While the system will ultimately bring about a better-planned and more efficient operation, it is not a panacea for all of the management ills plaguing the Federal Government. Moreover, the Planning-Programming-Budgeting system is not a perfect device and will not be installed without expenditures of time, effort, and manpower. Difficulties are bound to arise for a number of reasons including: the unfamiliarity of many Government officials with the PPB technique; the procedural and organizational problems that occur when a new process is superimposed on existing organizations; the lack of, or inexperience of, competent planners and systems analysts within the Federal Government; and the existence of bureaucratic pressures against the new system resulting from fears of loss of power and the revelation of overlapping or inefficient programs. Opposition

to the system will also come from industrial organizations that work closely with a given Federal agency and who do not want to see a familiar and profitable relationship disturbed.

Other problems of a more operational nature will arise. For example, it will be difficult, initially, to identify programs and program elements, such as education and foreign policy, that cut across the responsibilities of a number of agencies, and to structure these programs for budgetary and decision-making purposes. Furthermore, the question of who will be responsible for defining those programs that involve more than one agency will be a difficult one to resolve.

As a consequence, each agency head will have to answer a number of questions; namely: What is our role and mission? How should our program package be designed? How many and what kinds of program categories are relevant? What program responsibilities do we or will we share with other agencies? In cases where major programs are the responsibility of more than one agency, (this may be the rule rather than the exception) it may be necessary to create new supra-organizations such as the Defense Communications Agency, or inter-agency committees such as the Joint DOD/NASA Gemini Program Planning Board.

To incorporate the new system, the various agencies' planning and budgeting staffs will have to understand, in theory as well as in the practical terms of day-to-day agency operations, the management-decision making process. Such understanding will be difficult because even under ideal circumstances the decision-making process is a complex one, especially as it functions within a given agency structure where individual decisions - even major ones - are hard to trace and analyze.

For a while the old and the new systems will exist in parallel. Consequently, there will be difficulties in getting staff members familiar with the current method of decision-making, planning, and budgeting adjusted to the new techniques. Since they are more familiar with the present budget cycle and short-term costs, agency heads will also have difficulty adapting to the new system, wherein decisions will be based on long-term costs and multi-year budgets. In addition, it will be difficult for each agency to obtain and prepare reliable cost estimates for the various programs and program elements. This will result in an initially high degree of error, and may create confusion and frustration within agency staffs and in the Bureau of the Budget.

There will also be instances where the objectives of planning, programming and budgeting will clash with those of the agency head. Here it should be noted that the success of PPB techniques in the Department of Defense was largely a function of Secretary McNamara's belief in, and strong support for planning, programming and budgeting. Other agency and bureau heads may not feel as strongly about the system as Mr. McNamara does, or may resist it - particularly if it clashes with their goals and motivations.

Adoption of the Planning-Programming-Budgeting system may eventually lead to further centralization of inter- as well as intra-agency management. This, in turn, may result in organizational changes as well as shifts in the power and status of existing agencies and related personnel. To a degree, a trend toward a more centralized Federal management may be beneficial and more efficient. However, it will be necessary to guard against overcentralization of the planning

and analysis effort. For example, there may be a tendency for the staff responsible for the agency plan and the related analyses to regard their output as dogma and to resist constructive suggestions from whatever source. Moreover, a range of alternatives, or imaginative, high-risk proposals may not be considered unless a system for submitting "off-beat" ideas and counter-proposals, is installed before hand.

As previously noted, the present budget structure will continue to exist side by side with the new one for an indefinite period. Consequently, there will be some duplication and possibly conflicts about program and budgetary definitions. These difficulties will be minimized if the new budget structure is geared as closely to the present cycle until a smooth transition takes place.

There will be a problem hiring and training adequate numbers of analysts to man the planning, programming, and budgeting staffs within the various agencies. Unfortunately, such individuals cannot be created by directives or wishful thinking. In addition, the fact that good analysts, currently employed in challenging and good-paying jobs, are in short supply, both in and out of government. Moreover, most of the experienced planners and systems analysts have obtained their experience in the defense industry or with defense-oriented, non-profit institutions such as RAND, Mitre, and Aerospace. Consequently, it may be difficult to adapt their talents and experience to such non-defense problems as health, poverty, and water pollution. This problem can be minimized somewhat by drawing from the experience of those aerospace company and DOD analysts and planners who have utilized their talents

to solve non-defense problems for Federal, state, and local governments.\*

Other problems will be created by certain legislative and private interests who will oppose the new Planning-Programming-Budgeting system. To many of these individuals and organizations, the system will appear as a threat to their status, power, and prerogatives. To a degree, some of the resistance will be minimized because the development and application of planning, programming, and budgeting is being watched closely by the President, who has also directed the Bureau of the Budget to work closely with each agency head to see that the PPB directives and guidelines are followed. But in the main, opposition to the PPB will have to be overcome slowly by training capable planning and analytical staffs, by Presidential or agency-head actions, and by practical demonstrations that planning, programming, and budgeting will work.

Finally, the pace at which planning, programming and budgeting is adopted, the types and magnitude of the problems that arise, the manner in which solutions to such problems are found, and the efficiency with which the PPB system is utilized, will depend upon the conscientious efforts of many individuals within and outside of the Federal Establishment, who believe that a more rationally planned and efficient government is a desirable goal to work toward.

---

\* See Terhorst, Jerald, "The Business Role in the Great Society," The Reporter, October 12, 1965, p. 26.

### CONCLUSIONS

- The Federal Planning-Programming and Budgeting system proposed by President Johnson and currently being adopted by twenty-two Federal agencies evolved from the techniques of modern management, the efforts of the research and academic communities, and the experience of the Department of Defense. This system will have a significant, if not revolutionary, impact on the management of the Federal Government, particularly on the Presidential decision-making process, on the responsibilities and prerogatives of the various Federal agencies, and on the application of public and private resources to meet major national goals.
- Within the Department of Defense, planning-programming and budgeting have had direct and indirect effects on the organization of the Department; on budgetary, contractual, and procurement procedures; on the decision-making process; and on the DOD-Industry relationships. This, in turn, has brought about analogous changes in the defense industry that are reflected in the organization, management, and operating methods of specific companies.
- To incorporate the Planning-Programming-Budgeting system into the Federal Government with a minimum of difficulty, it will be necessary to understand and adapt the system to the Presidential as well as the agency decision-making process.
- A number of difficult but soluble problems will arise as planning, programming, and budgeting techniques are adopted. These problems include:



the unfamiliarity of many Government officials with the PPB process; the lack of or inexperience of planners and systems analysts within the Federal Government, and the existence of bureaucratic pressures against the system because of fears of loss of organizational and personal power, status, and prerogatives. To many the system will appear as a direct threat which will not be diminished by exhortations or promises of a more efficient government. Consequently, the degree of acceptance, the pace at which PPB is adopted, the types and magnitude of the problems that arise, the manner in which solutions to such problems are found, and the efficiency with which the system is utilized will depend on the efforts and support of determined and conscientious individuals within and outside the Federal Government.

- o One possible solution to the related problems of PPB acceptance and acquiring or training systems analysts and planners is to establish within the Washington, D.C. area a special school. This institution would instruct agency staff and management personnel in the various techniques of planning-programming and budgeting. It would draw on experienced personnel drawn from the academic, industrial and government communities and bring together planners and systems analysts from Government and private organizations. They would either conduct special studies or exchange information on their respective planning and budgeting techniques. Such seminars should increase the rapport between industry and government, create a better understanding of each others' problems and difficulties, and minimize some of the resistance to planning, programming and budgeting within and outside the Federal Government.

SUGGESTED STUDIES

- ⑥ The impact of the Planning-Programming-Budgeting system on the organization and operation of specific Federal agencies such as NASA, the State Department, and HEW.
- The managerial, organizational, and procedural problems arising from the introduction of planning, programming and budgeting: some possible solutions, guidelines, or approaches.
- Data requirements for the Federal Planning-Programming-Budgeting system.
- Cost/utility criteria for evaluating such national programs as transportation, space, and education.
- The relationship between national objectives and Federal agency objectives.
- Criteria for selecting and training a planning, programming, and budgeting staff.
- The role of the agency head in the Presidential decision-making process.
- The national space program: some considerations for aerospace management.
- The impact of planning, programming and budgeting on the organization, management and decision-making process within the Department of Defense.
- Similarities and/or differences between planning, programming, and budgeting for defense and non-defense programs.

- Planning, programming, and budgeting as applied to the proposed Boston to Washington high-speed transit system.
- The impact of Federal planning, programming, and budgeting on the Government/Industry relationships.
- The role of the President and the Executive Office in the planning, programming and budgeting process.
- The impact of Soviet competition and or threats on major national goals and programs.
- The TFX: A case history in planning, programming, and budgeting.
- COMSAT: an exception or a model for managing major federal programs.
- The probability and impact of a Soviet manned lunar landing on the U.S. space program.
- Criteria for selecting post-Apollo goals in space.

REFERENCES

1. Bulletin No. 66-3, Executive Office of the President, Bureau of the Budget, Washington, D.C., October 12, 1965.
2. Hitch, Charles J., and McKean, Roland N., The Economics of Defense in the Nuclear Age, Harvard University Press, 1960.
3. Hitch, Charles J., Decision-Making for Defense, University of California Press, Berkeley and Los Angeles, 1965.
4. New York Times, November 15, 1965.
5. Novick, David, Program Budgeting in the Department of Defense, The Rand Corporation, RM-4210-RC, September 1964.
6. Novick, David, (Editor), Program Budgeting, Government Printing Office, Washington, D.C., 1965.
7. Root, Eugene L., "Project Management From a Defense Industry Point of View," talk before the Air Force Institute of Technology, Project Management Course, October 1, 1965.
8. Rowen, Henry S., "Improving Decision-Making in Government," speech before the Budget Bureau's summer seminar on Systems Analysis and Program Evaluation, Executive Office of the President, Washington, D.C., August 19, 1965.
9. Scott, Brian W., Long-Range Planning in American Industry, American Management Association, Inc., New York, New York, 1965.
10. Terhorst, Jerald, "The Business Role in the Great Society," The Reporter, October 12, 1965.
11. Washington Post, November 9, 1965.